Ajinomoto Windsor Inc. – Basic #26-3293-BS-03

7124 N Marine Dr Portland OR 97203-6480

No DEQ documents available. We are currently requesting this document.

Arc Terminal – Title V #26-2025-TV-01

5501 NW Front Ave Portland OR 97210-1115

Overview

Paramount Petroleum Corporation owns and operates an asphalt refinery in Portland, Oregon. The Portland "Willbridge" refinery occupies approximately 38 acres of property located at 5501 NW Front Avenue. Asphalt production is one of the many processes grouped under "Petroleum Refining", classified under the Standard Industrial Code (SIC) 2911. Mr. Steven LeRoy is the NW Regional Manager, and he is currently identified as the primary responsible official for the permitted activities.

Facility Description

The raw materials (feedstocks) used in asphalt production are various grades of petroleum crude oils. The refinery receives feedstocks via either railcars or a marine loading dock at the neighboring Chevron bulk gasoline terminal. The process furnace heats the feedstock. Then the heated feedstock is fed into a distillation column where feedstock is separated into light, intermediate, and the bottom products by the fractionation process (aka stage distillation with reflux). Light products (i.e., distillates) drawn from the top of the column include naphtha, kerosene, and fuel oils. The intermediate products include diesel, fuel oils, and vacuum gas oil (VGO). The heavy products (i.e., residuals) drawn from the bottom of the column are the base materials that refinery use to make various grades of asphalt products.

The boilers produce steam required to heat/boil and separate the feedstock in the distillation column. The furnaces provide heat for the hot oil loop that keeps the materials viscous. The boiler-steam and hot oil loop also provide heat to various refinery equipment including pipeline and storage tanks that handle heavier-viscous products. Both "John Zink" thermal oxidizer (F3) and F4 with a recovery boiler B6 (F4/B6) controls air still fumes from the air blowing process.

The Willbridge refinery can process up to 20,000 barrels of feedstocks per day (bbl/day), which is the distillation column's capacity. The feedstocks vary from "charge stocks" that yields 90% base asphalt and 10% light products, to "heavy crude" that yields about 75% base asphalt and 25% of lighter products, to "a mixture of light and heavy crude" that yield approximately 50%

base asphalt and 50% lighter products. Distillation of light crude generates about 1.5% NCG, while heavier crude generates about 0.1% NCG. A combination of heavy and light crude oils would be used to maintain the maximum 20,000 bbl/day feed, and at the same time not overload the NCG piping from the distillation column.

Emissions

Provided below is a summary of the baseline emissions rate, netting basis, plant site emission limits, and emissions capacity.

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)			Capacity (tons/yr)
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	
PM_{10}	1	1	1	14	14	0	14
SO_2	42	42	42	81	81	0	81
NO_x	38	38	38	86	77	0	77
CO	32	32	32	99	99	0	99
VOC	179	179	179	162	179	0	179
H_2S	<1	<1	<1	15	9	0	9

Hazardous Air Pollutants

The facility is a minor source of hazardous air pollutants (HAPs) as the estimated emissions of all individual HAP are within the 10 tons/year threshold, and aggregate HAPs total less than 25 tons/year. Appendix A lists the estimated HAP emissions from the permitted facility

Toxic and Flammable Substances used at the facility and their estimated usage are summarized in Appendix A.

Stratospheric Ozone-Depleting Substances: The permittee does not use any of the Class I or class II ozone-depleting chemicals at the plant site, and therefore they are not subject to meet the requirements of 40 CFR Part 82, Subpart E; the Labeling of Products Using Ozone-depleting Products. The permittee does not perform service on motor (fleet) vehicles that involves the refrigerant in the motor vehicle air conditioner (MVAC), and therefore the requirements of 40 CFR Part 82, Subpart B; Servicing of Motor Vehicle Air Conditioners, do not apply.

Ash Grove Cement Company – Standard #26-1891-ST-01

13939 N Rivergate Blvd Portland OR 97203

Overview

The permittee operates a lime manufacturing plant. The process includes raw material handling and sizing of limestone and dolomite; hydrating lime to produce calcium hydroxide; and using roller mills/dryers to produce agricultural lime. The facility was established in 1964.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis (tons/yr)	PTE (tons/yr)	Plant Site Emission Limit (PSEL)		
				Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase/Decrease (tons/yr)
PM	95	95	98	98	98	0
PM_{10}	52	52	42	66	42	-24
SO_2	43	53	2	82	39	-43
NO_x	36	36	8	75	39	-36
CO	21	21	14	63	99	33
VOC	2	2	6	41	39	-2

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 or more tons/year of any single HAP, or 25 or more tons of combined HAPs. The facility would previously have been a major source for HAP if unregulated. With the removal of the lime kilns, that is no longer true. The remaining parts of the plant use only natural gas and landfill gas as fuels. Combined HAPs for the facility have been calculated at 0.02 tons/year.

Ash Grove Cement Company – Simple #26-0146-SI-01

3737 N Port Center Way Portland OR 97217

Overview

The permittee operates a cement and aluminum transfer facility. Material is unloaded from ships and railcars, transferred to storage silos, then loaded out to trucks and railcars. The former Goldendale side was built in 1982 and includes ship unloading, conveyance to silos, and a railcar load-out point. The Ash Grove side was built in 1995 and includes a railcar unload facility, storage elevator, and truck load-out point. The two sides are connected by a fully enclosed pipe conveyor.

Since the last permit renewal, two baghouses have been added to the facility. Some ground granulated blast furnace slag is now processed at the facility. A chemical analysis conducted in 2009 showed the slag to be of comparable particle size and consistency to cement and alumina. No adjustment to emission factors was deemed necessary.

Emissions

Proposed Plant Site Emission Limits (PSEL):

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis (tons/yr)	PTE (tons/yr)	Plant Site Emission Limits (PSEL)		
				Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM_{10}	n/a	n/a	n/a	14	14	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 or more tons/year of any single HAP, or 25 or more tons/year of combined HAPs. This facility is not a source of hazardous air pollutants.

BP West Coast Products – Title V #26-2030-TV-01

9930 NW St Helens Rd Portland OR 97231-1043

Overview

BP Portland Terminal receives, stores, blends, and transfers gasoline (numerous grades), fuel oils, lubricants, and a variety of other petroleum and chemical products, including biodiesel. Products are received via marine vessels, railroad tank cars, and the Olympic pipelines; then they are distributed via tank cars and tank trucks, marine vessels, and pipelines. No product manufacturing or refining takes place at the permitted facility. Blending of certain additives with gasoline may occur at the facility (loading racks). Oxygenated fuels are required in designated control areas as described in OAR 340-204-0090 during the winter months.

The BP Portland Terminal is a significant source of VOC emissions. The VOC emitting activities associated with the terminal operations include loading tanker trucks and trailers, loading marine vessels (barges and ships), the storage and transfer of products, and the fugitive-leak sources such as pumps, valves, and flanges, and when processing oily wastewater.

The VOC emissions from truck/trailer loading racks (TRACK) operations are captured and controlled by "John Zink" thermal oxidizer (TO), which emits fuel combustion by-products (i.e., criteria pollutants). Other miscellaneous insignificant sources of PM/PM_{10} emissions include the fugitive road dust generated from vehicle travel.

Emissions

Proposed Plant Site Emission Limits (PSEL) Summary:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM_{10}	0	0	0	14	14	0
SO_2	0	0	0	39	39	0
NO_x	0	0	0	39	39	0
CO	0	0	0	99	99	0
VOC	146	121	121	121	121	0

*The VOC PSEL of 159 tons/yr established in the expiring/previous permit was set prior to adoption of the marine loading rules, OAR 340-232-01 10, which became effective on June 1, 2001.

Hazardous Air Pollutants

The BP facility is a minor source of hazardous air pollutants (HAPs) because the estimated potential emissions of all individual HAP is less than the 10 tons/year threshold and the aggregate HAPs emission is less than the 25 tons/year threshold.

Hazardous Air Pollutant	CAS Number	Estimated PTE (tons/yr)
Benzene	71432	1.16
1,3 Butadiene	106990	0.083
Cresols	19773	0.0001
Cumene	98828	0.003
Ethylbenzene	100414	0.183
Hexane	110543	2.002
Naphthalene	91203	0.055
Phenol	108952	0.0001
Styrene	100425	0.0004
Toluene	108883	1.573
2,2,4 Trimethylpentane	540841	2.526

Xylenes	1330207	0.485
TOTAL		**8.6**

Bushwacker Inc. – Standard #26-0123-ST-01

9269 N Bradford St Portland OR 97203-2805

Overview

The permittee operates a coating line for plastic add-on vehicle parts. The process includes sanding and buffing in a sanding booth, paint mixing, coating, and baking (as necessary) of plastic parts. The sanding booth is controlled by a baghouse, rated at 99.6% efficiency; the baghouse vents indoors. High volume low pressure paint guns are used as necessary to meet customer specifications.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
VOC	0	0	0	39	39	0

Hazardous Air Pollutants

Hazardous Air Pollutant	Potential to Emit (tons/yr)
Xylene	1.5
Toluene	1.05
Ethylbenzene	0.3
Other HAPs	0.06
TOTAL	2.9

Cenveo Graphic Arts Center – Standard #26-2931-ST-01

2000 NW Wilson St Portland OR 97209-1817

Overview

The permittee operates an offset lithographic printing facility located at 2000 NW Wilson Street in Portland. The process includes heatset and non-heatset printing.

The Quantum catalytic oxidizer has been removed from the facility.

Emissions

Proposed Plant Site Emission Limit (PSEL) information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
NO_x	1.3	1.3	1	39	39	0
CO	1.1	0.3	1	99	99	0
VOC	140.3	141	120	99	99	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 or more tons/year of any single HAP, or 25 or more tons/year of combined HAPs. This facility is not a major source of hazardous air pollutants.

Hazardous Air Pollutant	Potential to Emit (tons/yr)
Combined HAPs	< 5

CertainTeed Corporation – Standard #26-2043-ST-02

6350 NW Front Ave Portland OR 97210

Overview

The permittee manufactures asphalt roofing shingles. The coating line consists of a fiberglass floating looper, a coater, mineral surfacing area, cool down rolls, seal strip application, nail line paint applicator, a finish looper, and laminate applicator. Associated processes such as asphalt/hot oil heaters, and materials (filler and sand) delivery and handling systems support the process. The facility was built in 1939.

The sand delivery and material handling system has been replaced with a pneumatic system since the last permit renewal. Exhaust gas from the laminant and sealant run tanks and the modified sealant mixture is being ducted to the Monsanto mist eliminator.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	10	10	10	34	34	
PM_{10}	10	10	10	24	24	
$PM_{2.5}$	n/a	n/a	10	n/a	9	
SO_2	10	10	10	39	39	
NO_x	11	11	11	39	39	
CO	9	9	9	99	99	
VOC	21	21	21	60	60	
GHG	3,669	n/a	3,669	n/a	n/a	

Hazardous Air Pollutants

Hazardous Air Pollutant	Potential to Emit (tons/yr)
Formaldehyde	2.73
Carbonyl Sulfide	1.60
Ethyl Benzene	1.31
Toluene	1.03
Other	6.67
TOTAL	12.0

Chevron – Title V #26-2027-TV-01

5531 NW Doane Ave Portland OR 92710-3607

Overview

The Chevron terminal receives, stores, blends, and transfers gasoline products, fuel oils, and a variety of other petroleum products. Products are delivered by marine vessels, railroad tank

cars, and the Olympic pipelines; and they are distributed by tank cars and tank trucks, marine vessels, and the pipelines. Chevron does not manufacture or refine any products at the permitted facility. Chevron blends gasoline with ethanol or other additives at the loading racks.

The Chevron terminal is a significant source of VOC emissions, which arise from the terminal operations that include loading tanker trucks and trailers, loading marine vessels (barges and ships), the storage of products, handling and processing of oily wastewater, and the fugitive-leak sources such as pumps, valves, and flanges. The facility also operates boilers to produce steam to heat and transport viscous liquid-products. The boilers generate fuel combustion by-products (e.g., criteria pollutants).

Chevron has identified two operating scenarios under which the permittee will operate their facility. The Chevron facility operates two vapor recovery units to capture and abate VOC emissions arising from truck/trailer loading (TRACK) and marine loading (MLOAD) operations. Under the normal operating scenario (OS #1), VRU_T abates VOC emissions from TRACK and VRU_M abates VOC emissions from MLOAD. Under the alternative operating scenario (OS#2), VRU_M is used to control VOC emissions from both MLOAD and TRACK operations.

Regardless of how VRUs are configured to control VOC emissions from TRACK and MLOAD, products throughput at the terminal is driven primarily by market factors and there are no tangible distribution limitations (bottlenecks) other than physical limitations such as pumping rates and the time required for changing outgoing vehicles. The PSEL (i.e., PTE) incorporated in this Title V permit is in effect the only (indirect) operating limitation placed upon the product distribution at this facility.

Emissions

The following table provides a summary of baseline emissions, netting basis, and the plant site emission limits incorporated in the proposed permit:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
$PM_{2.5}$	0	0	0	0	9	9
PM_{10}	9	9	9	14	14	0
SO_2	134	134	79	39	39	--
NO_x	27	27	27	39	39	0

CO	2	2	2	99	99	0
VOC	444	253	253	292	292	0

Hazardous Air Pollutants

Hazardous Air Pollutant	CAS Number	PTE (tons/yr)
Benzene	71432	1.18
Ethylbenzene	100414	0.15
Hexane	110543	3.3
Toluene	108883	1.98
Naphthalene	91203	0.01
M-xylene O-xylene P-xylene	108383 95476 106423	0.67
Cumene	98828	0.01
Methanol	67561	0.03
Total Aggregate HAPs		**< 8**

Columbia Steel Castings – Standard #26-1869-ST-01

10425 N Bloss Ave Portland OR 97203-6143

No DEQ documents available. We are currently requesting this document.

Container Management Services, LLC – Standard #26-2572-ST-01

3000 NW St Helens Rd Portland OR 97210

Overview

The permittee operates a drum reconditioning facility. The facility reconditions two types of drums; open-head and tight-head. The open-head drums have lids that are completely removable. The tight-head drums have solid tops with plugs and bungs for product removal. The facility began operations in 1929.

The tight-head drum process includes draining remaining product from drums, chemically cleaning the drum interior and water rinsing (light detergent) and shotblasting exterior of the

drum, further shotblasting if necessary to further clean the exterior surface, repairing damaged drums, and re-coating the exterior with paint. A drying oven is used to dry the coatings.

The open-heat drum process includes draining remaining product from drums, passing the drums and lids through a furnace to burn off residual product inside the drums as well as the interior and exterior coatings, shotblasting the drums and lids, straightening dents, leak testing drums in a water bath, drying the drums, and recoating the interior and exterior surfaces. A curing oven is used to dry the interior coatings (linings).

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	1	1.4	1	24	24	0
PM_{10}	1	1.2	1	14	14	0
SO_2	2	2.4	2	--	--	--
NO_x	5	5	5	39	39	0
CO	1	0.5	1	99	99	0
VOC	82	82.2	82	99	99	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 or more tons/year of any single HAP or 25 tons/year of combined HAPs. This facility is not a major source of hazardous air pollutants because it has chosen to take enforceable emission limits in order to be a minor source of HAP emissions.

Daimler Trucks of North America – Title V #26-2197-TV-01

6936 N Fathom St Portland OR 97217

Overview

Daimler Trucks North America, LLC operates a heavy-duty truck manufacturing plant (TMP) located at 6936 North Fathom Street, Portland, and a parts manufacturing plant (PMP) located at 5400 North Basin Avenue, Portland. The primary source of emissions at these facilities is the application of surface coatings.

Emissions

Current Plant Site Emission Limits (PSEL):

Pollutants	EU IDs								Total PSEL (tons/yr)
	1-AC		5-BO		6-CUT (c)		7-VOC	8-AGG	
PM/PM_{10}	OP: 2,234,750 lb paint solids/year (a)	lbs: 77,629	OP: 704,430 MMBtu/yr (e)	lbs: 8,453	OP: ---	lbs: 1,027.2	N/A	1 tpy	42
	EF: 0.0325 lb/lb paint solids (b)	tpy: 36.3	EF: 0.012 lb/MMBtu (d)	tpy: 4.2	EF: 85.6 lb/month (g)	tpy: 0.5			
CO	N/A		OP: 704,430 MMBtu/yr (e)	lbs: 14,793	N/A		N/A	1 tpy	9*
			EF: 0.021 lb/MMBtu (d)	tpy: 7.4					
SO_2	N/A		OP: 704,430 MMBtu/yr (e)	lbs: 1,831.5	N/A		N/A	1 tpy	2*
			EF: 0.0026 lb/MMBtu (f)	tpy: 0.9					
NO_x	N/A		OP: 704,430 MMBtu/yr (e)	lbs: 70,443	OP: --	lbs: 33,384	N/A	1 tpy	53
			EF: 0.1 lb/MMBtu (d)	tpy: 35.2	EF: 2,782 lb/month (g)	tpy: 16.7			
VOC	N/A		OP: 704,430	lbs: 5,142	N/A		OP: 466	lbs: 932,000	1 tpy	470

		MMBtu/yr			tons/yr			
		EF: 0.0073 lb/MMBtu (d)	tpy: 2.6		EF: N/A	tpy: 466		

*Actual PSEL set at the Generic PSEL level.
OP = Operating Parameter; EF = Emission Factor

The PSELs in this permit renewal are shown in the table below. All PSELs remain the same as in the prior permit. $PM_{2.5}$ is being added as a regulated pollutant and the assumption that all PM is $PM_{2.5}$ has been made. $PM_{2.5}$ is not a new pollutant being emitted, only a recognition that it exists from this source.

Pollutant	Netting Basis	PSEL		Difference from Netting Basis and PSEL		Unassigned Emissions	SER
		Previous	Proposed	Previous	Proposed		
*PM/PM_{10}	29	24	*24	-5	-5	5	25/15
**$PM_{2.5}$	29	N/A	24	N/A	-5	5	10
SO_2	4	39	39	+35	+35	0	40
NO_x	33	39	39	+6	+6	0	40
CO	14	99	99	+85	+85	0	100
VOC	444	470	470	+26	+26	0	40
***GHG	N/A	N/A	74,000	N/A	74,000	0	75,000

Hazardous Air Pollutants

The Potential to Emit Hazardous Air Pollutants (HAPs) for Calendar Year 2011 and beyond is:

CAS Number	Pollutant	Emission (in tons)
100414	Ethyl Benzene	0.43
108101	Methyl Isobutyl Ketone (MIBK)	0.01
67561	Methanol	2.31
108883	Toluene	0.56
1330207	Xylene	6.06
N/A	Chromium Compounds	2.50
TOTAL HAPs		11.87

Equilon DBA Shell Oil – Standard #26-2478-ST-02

3800 NW St. Helens Rd Portland OR 97210

Overview

Equilon Enterprises, LLC owns and operates a bulk gasoline terminal (SIC 5171) in Portland, Oregon, which was formerly owned by Texaco Refining and Marketing, Inc. The Portland terminal occupies approximately 9.5 acres of property located at 3800 NW St. Helens Road. Shell purchased Texaco's interest in Equilon Enterprises, LLC and the (Equilon) Portland terminal has been doing business as "Shell Oil Products US" effective on 03/01/2002. Regardless, Equilon remains the owner of the Portland terminal and no ownership and/or name changes to the permit have occurred.

The Equilon facility receives, stores, blends, and transfers gasoline (numerous grades), fuel oils, lubricants, and a variety of other petroleum and chemical products. Products are received via marine vessels and the Olympic pipelines; then they are distributed via tank cars and pipelines. No product manufacturing or refining takes place at the permitted facility. Blending of oxygenated additives with gasoline may occur at the facility (loading racks). Oxygenated fuels are required in designated areas per OAR 340-204-0090.

The Equilon terminal is a significant source of VOC emissions. Emissions of VOC associated with the terminal operations fall into four general categories: loading tanker trucks and trailers; the storage of products; handling and processing of oily wastewater; and the fugitive-leak sources such as pumps, valves, and flanges. Other miscellaneous insignificant sources of PM/PM_{10} emissions include the fugitive road dust attributed to vehicle travel. Marine loading operations have been discontinued and removed from the permit during this permit renewal.

Emissions

Proposed Plant Site Emission Limits (PSELs):

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM_{10}	0	0	0	14	14	0
SO_2	0	0	0	39	39	0
NO_x	0	0	0	39	39	0
CO	0	0	0	99	99	0
VOC	120	99	99	99	99	0

Hazardous Air Pollutants

Hazardous Air Pollutant	CAS Number	Estimated Emissions (tons/yr)
Benzene	71432	0.564
Toluene	108883	0.881
Ethylbenzene	100414	0.076
O-xylene	95476	0.078
M-xylene	108383	0.141
P-xylene	106423	0.109
Cumene	98828	0.001
Naphthalene	91203	0.001
TOTAL		1.9

ESCO Corporation – Title V #26-2068-TV-01

2141 NW 25th Ave Portland OR 97210

Background

People living and working the Northwest Portland neighborhood to the south of ESCO's plants have complained to DEQ for a number of years about odors, dust and other emissions from ESCO's plants. An article published in the USA Today newspaper in late 2008 about the effect of industrial emissions on nearby schools raised the level of concern, and the Northwest District Association (NWDA) and Neighbors for Clear Air (NCA) led a drive to get ESCO to reduce emissions.

In 2009, ESCO engaged in a series of discussions with neighborhood representatives and agreed to consider improvements to their air pollution control systems. A negotiating group consisting of neighborhood representatives, ESCO, local legislators, and DEQ was formed. ESCO hired an engineering consulting firm (ERM) to review their operations and emissions control system. ERM recommended a number of improvements, and ESCO proposed to make some of the recommended improvements. Concurrently, neighborhood representatives felt that an independent review of ESCO's operations and the ERM report was needed before they could agree with ERM's conclusions and ESCO's proposal. DEQ supported this request by the community and hired Mr. Jim Karas to perform the independent audit of the facilities and ERM's report. Mr. Karas and his associate generally confirmed ERM's recommendations and made some additional recommendations.* As a result of Mr. Karas' review and further

discussions with the negotiating group, ESCO revised the list of improvements they proposed to make.

Related to the discussions described above, in mid-2010 ESCO informed DEQ that they would be willing to enter into a Best Work Practices Agreement (BWPA). ESCO also informed the neighborhood representatives that they were willing to discuss a Good Neighbor Agreement (GNA). As a result of the work and negotiations summarized above, a number of new permit conditions have been written that require ESCO to make the improvements they proposed. [*For a more detailed description of the background history of ESCO, subsequent negotiations, and resolutions, please refer to the original ESCO Corporation permit document.]

Overview

ESCO is a steel foundry that makes steel parts that are used mainly for mining, dredging and construction. The size of the parts ranges from about 40 pounds each up to several thousand pounds each. The process involves melting and refining steel; pouring the steel into a mold (pouring); allowing the steel to cool and harden (cooling); removing the part from the mold (shakeout); finishing operations such as cutting, grinding, welding, and sandblasting; and, painting. ESCO has two plants, the Main Plant on NW Vaughn Street, and Plant 3 on NW Yeon Avenue. The Main Plant makes larger parts, typically over 50 pounds each. Plant 3 makes smaller parts, typically less than 50 pounds each.

Emissions

Pollutant	Proposed Plant Site Emission Limit (tons/yr)	PSEL in 2004 permit (tons/yr)	Amount of Change (tons/yr)
PM	134	214	-80
PM_{10}	134	214	-80
$PM_{2.5}$	134	n/a	n/a
SO_2	39	39	0
NO_x	65	65	0
CO	348	312	+36
VOC	93	93	0
Pb	--*	0.5	0
GHG	74,000	n/a	n/a

OAR 340-222-0020(3) states that TSELs are not required for pollutants that will be emitted at less than the de minimis emission level listed in OAR 340-200-0020 from the entire source. The de minimis level for lead is 0.1 ton per year (OAR 340 Division 200, Table 4). The permit includes a voluntary lead limit of 0.1 tons per year in condition 47, and as long as this limit is in the permit, a PSEL for lead is not required. Therefore, DEQ has deleted the lead PSEL from the permit and will leave only the voluntary lead limit in condition 47. However, the 0.1 ton per year lead limit is voluntary, and to avoid giving the false impression that DEQ can continue to set a lead limit of 0.1 ton per year even if ESCO withdraws it, DEQ has added a note clarifying that a lead PSEL will be set at 0.5 ton per year in accordance with OAR 340-222-0041(1) in the event the voluntary lead limit of 0.1 ton per year is withdrawn.

Plant Site Emission Limit (PSEL) table:

Pollutant	Plant Site Emission Limit (tons/yr)	Unassigned Emissions (tons/yr)	Emission Reduction Credit (tons/yr)
PM	134	105	0
PM_{10}	134	95	0
$PM_{2.5}$	134	95	0
SO_2	39	0	0
NO_x	65	6	0
CO	348	0	0
VOC	93	29	0
GHG	74,000	0	0

Unassigned emissions for PM, PM_{10} and $PM_{2.5}$ are greater than the SER and will be reduced to the SER at the next renewal of this permit unless they are used before that.

Hazardous Air Pollutants

Hazardous Air Pollutant	Emissions (lb/yr)	Emissions (tons/yr)	Pollutant	Emissions (lb/yr)	Emissions (tons/yr)
Lead	207.0	0.10	POMs*	0.0	0.00
Mn	1,256.10	0.63	Hexane	781.6	0.39
Ni	191.3	0.10	Dichlorobenzene	0.4	0.00

Cr	132.7	0.07	Acrolein	134.3	0.07
Hg	3.9	0.00	Ethylbenzene	216.4	0.11
Cd	56.6	0.03	Xylenes	879.9	0.44
Co	14.1	0.01	Biphenyl	520.4	0.26
As	11.9	0.01	Aniline	624.7	0.31
Sb	1.3	0.00	Acetaldehyde	1,217.4	0.61
Se	23.1	0.01	Methylnaphthalene	1,527.2	0.76
Phenol	16,936.6	8.47	Propionaldehyde	35.5	0.02
Formaldehyde	6,331.9	3.17	Cyanide compounds	628.3	0.31
Benzene	3,800.8	1.90	Dimethylaniline	236.8	0.12
Cresols	4,673.7	2.34	Tetrachloroethylene	38.0	0.02
Toluene	2,081.1	1.04	Trichloroethylene	946.0	0.47
Naphthalene	2,454.5	1.23	Cumene	125.6	0.06
Triethylamine	306.2	0.15	MIBK	162.6	0.08
Diisocyanates	22.4	0.01	Styrene	292.7	0.15
Trimethylbenzene	93.9	0.05			
			Total HAPs	**46,967.2**	**23.5**

*POMs excluding naphthalene and methylnaphthalene

EVRAZ Oregon Steel – Title V #26-1865-TV-01

14400 N Rivergate Blvd Portland OR 97203

Overview

Oregon Steel Mills, Inc. (OSM) owns and operates a steel production facility located on the east bank of the Willamette River in the Rivergate industrial district at 14400 N. Rivergate Blvd., Portland, Oregon. An additional portion of this source is the Heat Treat facility which is located at 10400 N. Swift Court, Portland, Oregon.

The facility is a "steel mini-mill", consisting of a melt shop, rolling mill and heat treat facility, producing cast steel slabs and steel plate using ferrous scrap or similar metallic materials as the primary raw material. The melt shop has not operated since May of 2003. Since the shutdown of the melt shop, steel slabs have been purchased on the open market and are rolled into plate or coil in the facility's rolling mill. The melt shop could be returned to operation at any time subject to market conditions. The Heat Treat facility further processes some of the steel plate produced at the Rivergate facility to enhance physical characteristics based on customer specifications.

In February of 2005 the permittee submitted a Notice of Intent to Construct application to the Department for the construction of a spiral weld pipe mill at its Rivergate facility. The Notice of Intent to Construct was approved by the Department on March 31, 2005. This permit modification is for the purpose of incorporating permit conditions into the permit to allow operation of the new pipe mill and its associated surface coating operations.

The proposed spiral weld pipe mill will spirally unwind coiled steel to a specific pipe diameter. The seams of the spiraled coil are welded using a low emitting submerged arc welding process. The pipe is deburred, cleaned out, cut to length at a plasma cutting station, and tested for integrity. If repair is necessary it is performed at a cross seam re-weld process using shielded metal arc welding. Following the pipe forming process, it is then coated in the pipe coating building. Prior to coating the external surface, outer diameter abrasive blasting is performed for surface preparation. Surface coating is then performed on the pipe's outer diameter using a powder coat process. Following outer diameter powder coating, pipe may receive an additional 2 or 3-layer polyethylene extrusion coating. Pipe that is to receive internal surface coating will proceed through an internal diameter abrasive blasting process for surface preparation. A hot air-dried epoxy surface coating is then applied to the internal diameter surface using high volume low pressure spray technology. Particulate emissions resulting from outer diameter abrasive blasting, powder coating, and internal diameter abrasive blasting are to be controlled by baghouse control devices. VOC emissions resulting from internal diameter surface coating will be controlled by an oxidative control device (the specific oxidative control technology [thermal or catalytic] had not been chosen by OSM at the time of permitting).

Emissions

The following table summarizes the baseline emissions rate, netting basis, plant site emission limits, and emitting capacity:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)			Current Capacity (tons/yr)
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	
PM/PM_{10}	970	N/A	970	612	628	16	628
CO	4107	N/A	4107	3183	3526	343	3541
NO_x	592	N/A	592	532	631	99	656
SO_2	810	N/A	810	151	153	2	153
VOC	92	N/A	92	67	131	64	187
Lead (Pb)	5.6	N/A	5.6	5.0	1.6	-3.4	1.6

The proposed Plant Site Emission Limit (PSEL) for each pollutant is less than the netting basis plus the significant emission rate (SER) as is shown below. No further air quality analysis is necessary at this time.

Pollutant	Netting Basis	Requested PSEL	Increase Over the Netting Basis	SER
PM/PM_{10}	970	628	N/A (-342)	25/15
CO	4107	3526	N/A (-581)	100
NO_x	592	631	39*	40
SO_2	810	153	N/A (-657)	40
VOC	92	131	39*	40
Lead (Pb)	5.6	1.6	N/A (-4.0)	0.6

Hazardous Air Pollutants

The following table summarizes the permittee's potential to emit hazardous air pollutants (HAPs):

Hazardous Air Pollutant	Potential to Emit (tons/yr)	Emission Unit Sources
Benzene	16.280	EU-4, EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26
Toluene	3.106	EU-4, EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26
Styrene	2.320	EU-4
Vinyl Chloride	0.460	EU-4
MEK	14.038	EU-17, EU-27
Xylenes	11.338	EU-4, EU-5, EU-10, EU-13, EU-16, EU-20, EU-21, EU-23, EU-26
Chlorobenzene	0.438	EU-4
Ethylbenzene	10.863	EU-4, EU-16
Formaldehyde	0.154	EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26, EU-27
PAHs	0.057	EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26
Naphthalene	0.573	EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26
Acetaldehyde	0.115	EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26, EU-27
Acrolein	0.037	EU-5, EU-10, EU-13, EU-20, EU-21, EU-23, EU-26, EU-27
Methanol	0	N/A
1,3-Butadiene	0	N/A
Hydrogen Chloride (HCl)	0	N/A

Arsenic	0.012	EU-9
Beryllium	0	N/A
Cadmium	0.121	EU-4, EU-9
Cobalt	5.839	EU-4, EU-9, EU-27
Chromium	0.360	EU-4, EU-9, EU-27
Mercury	0.001	EU-9
Manganese	4.111	EU-4, EU-9, EU-27
Nickel	0.013	EU-4, EU-9, EU-27
Lead (Pb)	0.017	EU-22, EU-27
Selenium	0	N/A
Combined HAP PTE	**70.253**	

EZFLOW, Limited Partnership – Simple #26-0157-SI-01

3004 N Wygant St Portland OR 97217-3503

Overview

The permittee operates a drainage product manufacturing facility. Polystyrene pellets are loaded into a machine called an expander. Steam from a small boiler is used to activate the isopentane in the pellets to make them expand. The polystyrene pellets expand approximately 40 times their original size. Most of the isopentane is released to the atmosphere during the expansion process. All isopentane contained in the unexpanded pellets is presumed to be released on-site. The product is cured in bags for 24 hours, and then fed into a second expander, where they become twice as large. The product is again stored for several hours, and then conveyed to the assembly area. The fully expanded polystyrene is blown around a corrugated pipe and captured by polyethylene netting to produce the final product. The facility was built in 2007.

Emissions

Proposed Plant Site Emission Limit (PSEL) information:

	Baseline Emission Rate	Netting Basis		Plant Site Emission Limit (PSEL)		
				Previous	Proposed	PSEL
Pollutant	(tons/yr)	Previous (tons/yr)	Proposed (tons/yr)	PSEL (tons/yr)	PSEL (tons/yr)	Increase (tons/yr)
VOC	0	0	0	39	39	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. The facility will emit approximately 0.15 tons of styrene (from heating of polystyrene pellets) each year. PTE for styrene emissions for this facility have been estimated at 0.22 tons/year. This source is not a major source of hazardous air pollutants.

Galvanizers Company – Simple #26-1885-SI-01

2406 NW 30th Ave Portland OR 97210-2014

Overview

The permittee operates a hot dip zinc galvanizing and pipe coating facility. The facility was built in 1941.

The following changes have been made to the facility since the last permit renewal: The original boiler was replaced with a 3348 MBH (thousand BTU/hour) natural gas fired Kewanee steam boiler.

Emissions

Pollutant	Netting Basis		Plant Site Emission Limit (PSEL)		
	Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	N/A	N/A	24	24	0
NO_x	N/A	N/A	39	39	0
CO	N/A	N/A	99	99	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Gunderson LLC – Title V #26-2944-TV-01

4700 NW Front Ave Portland OR 97210

Overview

Gunderson LLC operates a railcar and marine barge manufacturing facility on Front Avenue in Portland, Oregon. The primary processes occurring at this facility include cutting steel with plasma and gas flame burning machines; sandblasting steel with steel shot and grit blast media; welding using flux core, gas metal and shielded arc welding types; and painting and stenciling railcars using high-solids VOC compliant coatings. Gunderson LLC purchased the facility from FMC Corporation in 1985.

Emissions

Emissions Unit	EU ID	Source Classification Code
Shot and grit blasting (fugitive)	2-BLF	grit - 3-09-002-05 shot - 3-09-002-07
Shot blasting, (baghouses 1, 2, 3)	2-BLB123	shot - 3-09-002-07
Grit blasting, (new baghouses 4, 5)	2-BLB45	grit - 3-09-002-05
Wet metal cutting devices	3-TC	NG cutting - 3-09-046-00 Plasma cutting - 3-09-030-08
Natural gas combustion devices	4-NG	NG use 3-09-900-03
Welding	5-WLD	FCAW - 3-09-053-55 SAW - 3-09-054-10 GMAW - 3-09-052-00
RACT Coatings	6-COAT	4-02-025-01
Ship MACT Coatings	7-SMCT	topcoat - 4-02-023-06
Overspray particulate	8-OSPRY & 8-OSPRYM	4-02-025-01
Facility wide VOCs (for PSELs)	9-VOC	coat - 4-02-025-01 clean - 4-02-025-02

Hazardous Air Pollutants

CAS Number	Pollutant	Potential to Emit (in tons)
75070	Acetaldehyde	0.012
107028	Acrolein	0.005
71432	Benzene	0.006
-----	Chromium Compounds	0.01

-----	Cobalt Compounds	0.003
100414	Ethyl Benzene	3.03
50000	Formaldehyde	0.014
------	Glycol Ethers	0.94
-----	Manganese Compounds	3.4
108101	Methyl Isobutyl Ketone	0.08
67561	Methanol	3.26
91203	Naphthalene	0.084
-----	Nickel Compounds	0.01
-----	Polycyclic Organic Matter	0.092
108883	Toluene	66.8
1330207	Xylene	81

J R Simplot Company – Standard #26-1889-ST-01

14003 N Rivergate Blvd Portland OR 97203-6514

No DEQ documents available. We are currently requesting this document.

Overview

Wholesale distribution of chemicals and allied products (retaining netting basis).

Emissions

Plant site emissions must not exceed the following:

Pollutant	Limit (tons/yr)
PM	28
NO_x	39
CO	99

Hazardous Air Pollutants

None listed.

Journal Graphics – Simple #26-0103-SI-01

2840 NW 35th Ave Portland OR 97210-1604

Overview
The permittee operates a heatset lithographic printing facility. The facility was built in 1995.

Since the last permit renewal five heatset lithographic printing units, controlled by an Ecocool dryer/afterburner were installed on the Goss Sunday 2000 press under NC 26267. The dryer does not function when the afterburner is turned off. The new equipment was installed in 2011 and source tested in January 2012.

The facility's only cold-set press was removed in 2007.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
NO_x	0	0	0	39	39	0
CO	0	0	0	99	99	0
VOC	0	0	0	39	39	0

Hazardous Air Pollutants
A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. The facility emits a small amount (<1 ton/year) of xylene from the use of blanket wash. Per the MSDS provided, no other HAP-containing material is used. This facility is not a major source of hazardous air pollutants.

Kinder Morgan Bulk Terminals – Standard #26-2909-ST-01

11040 N Lombard St Portland OR 97203

Overview
The permittee operates a bulk fertilizer marine loading facility at the Port of Portland's Terminal 4. The facility handles soda ash, bentonite, potash and agricultural products, fertilizers or grains. The products are all "out-bound", meaning all products are exported; the facility no longer handles "in-bound", meaning imported products. Terminal 4 transfers dry bulk products from railcars to storage to vessels by means of a conveyor system. Dust control

is provided by baghouses and bin vents. The facility was originally built in 1974 by the Port of Portland and the facility was operated by Hall-Buck Marine, Inc. beginning in 1988 and by Kinder Morgan Bulk Terminals, Inc. beginning in 1998.

Emissions

Pollutant	SER	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
			Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM_{10}	15	18	18	18	32	32	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Kinder Morgan Liquid Terminals LLC – Title V #26-2028-TV-01

5880 NW St Helens Rd Portland OR 97210-1146

Overview

The Kinder Morgan terminal receives, stores, blends, and transfers gasoline products, fuel oils, lubricants, and a variety of other petroleum products including biodiesel. Products are delivered by marine vessels, railroad tank cars, and the Olympic pipelines; and they are distributed by tank cars and tank trucks, marine vessels, and the pipelines. Kinder Morgan does not manufacture or refine any products at the permitted facility. Kinder Morgan can blend gasoline with ethanol or other additives at the loading racks.

The Kinder Morgan terminal is a significant source of VOC emissions, which arise from the terminal operations that include loading tanker trucks and trailers, loading marine vessels (barges and ships), the storage of products, handling and processing of oily wastewater, and the fugitive-leak sources such as pumps, valves, and flanges. The facility also operates boilers to produce steam to heat and transport viscous liquid-products. The boilers generate fuel combustion by-products (e.g., criteria pollutants).

Emissions

The following table provides a summary of baseline emissions, netting basis, and the plant site emission limits incorporated in the proposed permit:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
$PM_{2.5}$	**	**	**	0	9	**
PM_{10}	29	29	29	14	14	0
SO_2	420	420	144	104	104	0
NO_x	84	84	84	44	44	0
CO	8	8	8	99	99	0
VOC	299	205	205	236	236	0

** Data Not Available

Hazardous Air Pollutants

The KM facility is a minor source of hazardous air pollutants (HAP) because the estimated potential emissions of all individual HAP is less than the 10 tons/year threshold and the aggregate HAPs emission is less than the 25 tons/year threshold.

Hazardous Air Pollutant	CAS Number	% of VOC	PTE (tons/yr)
2,2,4-Trimethylpentane	540841	0.8	1.9
Benzene	71432	0.9	2.1
Ethylbenzene	100414	0.1	0.2
Hexane	110543	1.6	3.8
Naphthalene	91203	0.05	0.1
Toluene	108883	1.3	3.1
Xylene	1330207	0.5	1.2
TOTAL			12.4

Note: %VOC based on HAP speciation profiles of gasoline, EPA technical reports for Emission Inventory Improvement Program, Table 11.3-2 in Volume III, Chapter 11. PTE based on HAP profiles of gasoline applied to KM's PSEL.

Koppers Inc – Simple #26-2930-SI-01

7540 NW St Helens Rd Portland OR 97210

Overview

Koppers, Inc. receives, stores, and transfers coal tar pitch used in the primary aluminum production industry and residual oil. Hot oil heaters warm the coal tar pitch prior to load-out to trucks. Fumes from storage transfer and processing are collected and routed to a fume control system.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
SO_2	0	0	0	39	39	0
NO_x	0	0	0	39	39	0
CO	0	0	0	99	99	0
VOC	0	0	0	39	39	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Hazardous Air Pollutant	Potential to Emit (in tons)
Naphthalene	2.00
Quinoline	0.13
Biphenyl	0.16
Dibenzofuran	1.0
Total	**3.0**

Maruichi Oregon Steel Tube LLC – Standard #26-0054-ST-01

8735 N Harborgate St Portland OR 97203-6363

No DEQ documents available. We are currently requesting this document.

Northwest Pipe Company – Title V #26-2492-TV-01

12005 N Burgard Way Portland Oregon 97203

Overview

Northwest Pipe Company owns and operates a steel pipe fabricating facility located at 12005 N. Burgard Way in Portland, Oregon. Northwest Pipe Company manufactures spiral and straight seam metal pipe. At this time, the facility is only manufacturing spiral scam metal pipe, making the UV filter unit emission unit unnecessary to operate. Steel sheets are formed into pipe, fluxed and welded, cleaned by blasting, and coated. If additional milling has to be done to the pipe (installation of fittings), the pipe is coated, milled, re-cleaned by sandblasting, and recoated. Each job is specific to what the customer needs. Pollution sources at the facility include emissions from solvents in the pipe coatings, smoke/fume from coal tar application, particulate matter from blasting and cement handling, and fugitive dust from vehicle traffic.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis (tons/12-mo)	Plant Site Emission Limit (PSEL)			Significant Emission Rate (tons/12-mo)
			Previous PSEL (tons/12-mo)	Proposed PSEL (tons/12-mo)	PSEL Increase (tons/12-mo)	
PM	92	92	73	73	no change	25
PM_{10}	43	43	28	28	no change	15
CO	1.0	0	99	-----	[99]	100
NO_x	3.0	3	39	39	no change	40
SO_2	1.0	0	39	-----	[39]	40
VOC	347	247	247	247	no change	40

Note: Decreases in brackets

Hazardous Air Pollutants

The facility is a major source of HAP emissions. The table below summarizes the 2004 HAP annual emissions.

Hazardous Air Pollutant	2004 Emission (tons/year)
Carbon Tetrachloride	0.01
Ethylbenzene	1.0
MDI	0.1
Methyl Ethyl Ketone	3.4
Methylene Chloride	9.0
PAC	0.03

Phenanthrene	0.03
Toluene	0.9
Xylene	4.8
Manganese	0.9
Formaldehyde	0.01
Total	**20.2**

Olympic Pipe Line – Simple #26-3072-SI-01

9420 NW St Helens Rd Portland OR 97231-1135

Overview

The permittee operates a refined petroleum products (gasoline, diesel, and jet fuel) pipeline delivery facility in Portland. The facility has two 2,000-barrel (84,000 gallon) storage tanks with internal floating roofs. Construction of the tanks was commenced in 1964. The tanks were upgraded with internal floating pans in 1981. The facility was built in 1965.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
VOC	0	0	0	39	39	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Owens Corning Roofing and Asphalt LLC – Title V #26-3067-TV-01

11910 NW St Helens Rd Portland OR 97231-2306

No DEQ documents available. We are currently requesting this document.

Owens Corning Roofing and Asphalt LLC – Standard #26-1815-ST-01

3750 NW Yeon Ave Portland OR 97210

Overview

The permittee manufactures three types of roofing products: rolled roofing, standard (non-laminate) residential roofing, and laminated residential roofing. The facility was established prior to 1972.

Raw materials (fillers, parting agents, and surfacing materials) are received by truck and stored in silos, bins and bags. Filler is passed through the upper surge hopper, through the filler heater, to the lower surge hopper. Emissions from the upper surge hopper are controlled by a dust collector.

Sealant asphalt received by bulk truck is loaded into storage tanks. Material from these tanks is pumped to the sealant use tank or the laminate sealant use tank. Fumes from the sealant bulk storage tank are vented through the MLA/Sealant fiber bed filter. Fumes from the sealant use tank are vented through the Coating Area fiber bed filter. MLA means 'modified laminate adhesive'.

Coating asphalt is first placed in storage tanks, then mixed with filler for use in the asphalt coater. "Filled coating" is moved from the mixer to the asphalt coater through a surge tank. Both units are vented to the coating area fiber bed filter. During manufacture, the mixture is continuously circulated between the surge tank and the coater. For the Duration™ product, a blend of laminate and sealant asphalt is mixed with filled coating in the sealant mix tanks prior to application to the product.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		PTE (tons/yr)	Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)		Previous (tons/yr)	Proposed (tons/yr)	Change (tons/yr)
PM	136	136	106	96	99	96	-3
PM_{10}	86	86	106	96	99	96	-3
NO_x	79	79	64	6	39	39	n/a
SO_2	278	260	260	<1	0	0	n/a
CO	201	201	79	29	99	99	n/a
VOC	33	33	46	64	72	64	-12

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Hazardous Air Pollutant	Potential to Emit (tons/year)
Formaldehyde	2.1
Carbonyl sulfide	3.3
Metals	0.2
Miscellaneous HAPs	2.6
Total	**8.2**

Phillips 66 – Standard #26-2026-ST-01

5528 NW Doane Ave Portland OR 97210

Overview

The permittee operates a bulk gasoline terminal located at 5528 NW Doane Avenue in Portland. The facility was previously owned and operated by Tosco Corporation and Phillips Petroleum Company. The terminal has 118 storage tanks for approximately 854,885 barrels of storage tank capacity. The products that are stored and loaded from the facility may include, but are not limited to, gasoline, diesel, fuel/heating oil, ethanol, lube oils, and other common commercially available bulk organic liquid products. Organic vapors from the truck loading rack (gasoline/diesel) are controlled by a dual-bed carbon adsorption vapor recovery unit (VRU).

Organic liquid products are stored predominantly in fixed-roof above-ground storage tanks at the facility. Storage tanks having capacity of greater than 39,000 gallons and storing a volatile organic compound (VOC) liquid with a true vapor pressure that is greater than 1.52 psia, as stored, at actual monthly average storage temperatures, are equipped with internal floating covers having at least a primary seal.

Emissions

	Baseline Emission Rate	Netting Basis		Plant Site Emission Limits[(a)] (PSEL)		
		Previous	Proposed	Previous	Proposed	Change

Pollutant	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
PM/PM_{10}[(a)]	1.1	1	1	14	14	0
SO_2	1	75	75	75	75	0
NO_x	11.3	8	8	39	39	0
CO	2.8	7	7	99	99	0
VOC	726.4	119	119	99	99	0

Hazardous Air Pollutants

The permittee handles products that contain components that are listed as Hazardous Air Pollutants (HAPs) in Section 112(b) of the Federal Clean Air Act and OAR 340-244-0040, Table 1. Using mass balance calculations, the permittee determined that when total VOC emissions are limited to 99 tons/year, its potential to emit HAPs is below the major source thresholds (major source threshold for HAPs = potential to emit 10 or more tons of any single HAP or 25 or more tons of any combination of HAPs) of the Title V Federal Operating Permit program. The permit contains conditions requiring the permittee to monitor HAP content of terminaled products to ensure that changes in product formulations do not threaten the facility's minor source status. At the time of permit issuance, actual maximum HAP emissions were estimated to be less than 3 tons/year of total combined HAPs.

Purdy/Sherwin Williams – Basic #26-9542-BS-01

13201 N Lombard St Portland OR 97203-6410

No DEQ documents available. We are currently requesting this document.

Rodda Paint – Standard #26-0026-ST-01

6123 N Marine Dr Portland OR 97203-6443

Overview

The permittee operates a paint and shellac manufacturing facility. Various resins and solvents are mixed with paint solids (pigments) in tanks known as dispersion tanks. The resulting product is transferred to a letdown tank for temporary storage. The product is then transferred to one and five-gallon containers, or to 300-gallon totes. The operating schedule is 10 hours per day, five days per week (2600 hours per year).

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits[(a)] (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
VOC	0	0	0	39	39	0
Single HAP	0	0	0	9	9	0
All HAP	0	0	0	24	24	0

Hazardous Air Pollutants

Hazardous Air Pollutant	Potential to Emit (tons/year)
Xylene	12.7
Toluene	6.8
Ethylene glycol	4.9
Total PTE for all HAPs	**35.3**

Rusco Inc/ Dura Industries – Simple #26-3112-SI-01

4466 NW Yeon Ave Portland OR 97210-1430

Overview

The permittee operates a "job shop" coating facility. The facility coats items including aluminum extrusion parts used in the construction of commercial buildings, truck parts, plastic, glass, and copper and brass parts. The facility uses both liquid and powder coating applied using electrostatic, HVLP, and conventional hand spray guns. The facility began operations 11/21/1983.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
VOC	0	0	0	39	39	0

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Siltronic Corp – Standard #26-3002-ST-01

7200 NW Front Ave Portland OR 97210-3676

Overview

The permittee manufactures high purity silicon wafers for production of electronic circuits in the electronics industry. The process includes crucible growing of monocrystalline silicon ingots, ingot shaping (cropping and grinding), ingot slicing, wafer shaping, wafer polishing, and epitxial growth. Construction of the facility began in 1978, and production began in FAB 1 in 1979. FAB 2 was constructed and began operation in 1996.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	5	3	3	15	27	27
PM_{10}	5	3	3	n/a	17	17
SO_2	n/a	n/a	n/a	61	n/a	n/a
NO_x	57	34	44	73	83	10
CO	9	6	6	18	99	81
VOC	16	15	15	54	54	n/a

Hazardous Air Pollutants

A major source is a facility that has the potential to emit more than 10 tons/year of any single HAP or 25 tons/year of combined HAPs. This facility is not a major source of hazardous air pollutants. Hydrogen chloride (HCl) and hydrogen fluoride (HF) emissions from the process are controlled by 99% efficient wet scrubbers with pH control. The scrubbers are equipped with alarms and are integral to the process. If the scrubbers stop operating, the process line shuts down.

	Potential to Emit

Hazardous Air Pollutant	(tons/year)
Hydrogen chloride	3
Hydrogen fluoride	2
Total	**5**

Solenis LLC – Standard #26-1814-ST-01

3366 NW Yeon Ave Portland OR 97210

Overview

The Hercules Portland facility is designed to manufacture a variety of organic and inorganic chemicals that are primarily used by the pulp and paper industry. In the past, the chemical manufacturing processes started with the tall oil distillation processes. However, a tall oil facility containing two vacuum-distillation columns in series that were used to fractionate crude tall oil has been permanently shut down (as of October 1999). The process equipment within the tall oil facility has been removed.

The new 600 BHp (24 MM Btu/hr) Cleaver Brooks is the main boiler, installed in June 2004. NC #020809. This boiler operates mainly on natural gas with diesel as the backup fuel.

The NCG generated from the tall oil facility was the number one odor-causing source. This NCG-odor problem no longer exists. The main (Cleaver Brooks) boiler at the facility now burns natural gas and consequently the smoke problems have been greatly reduced. Furthermore, boilers are operated less than before due to the permanent reduction in energy demand. Overall, a major change in terms of air quality has occurred at the Hercules plant. The current plant site emissions are significantly below the allowable level, and a major reduction in (potential) odorous emissions has occurred.

Emissions

Pollutant	1977 Baseline (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)			SER
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	
PM	12.4	12	12	24	24	0	25
PM_{10}	12.4	12	12	14	14	0	15
$PM_{2.5}$	N/A	N/A	12	N/A	9.0	0	10
SO_2	40.8	41	41	55	55	0	40
NO_x	26.9	27	27	39	39	0	40

CO	6.5	7	7	99	99	0	100
VOC	43	43	43	39	39	0	40

Hazardous Air Pollutants

Hercules is a minor source of hazardous air pollutants (HAP). The PTE of individual HAP emissions is less than 10 tons/year and the PTE of combined HAPs emission on an aggregate basis total less than 25 tons/year. The combined HAP PTE is 5.7 tons/year based on maximum production from rosin and dimer processes. The largest single HAP PTE is 2.4 tons/year for epichlorohydrin. This source is not subject to federal regulations for National Emissions Standards for Hazardous Air Pollutants (NESHAP).

SoloPower – Simple #26-0207-SI-01

6308 N Marine Dr Portland OR 97203

Overview

The permittee proposes to renovate an existing building to install photovoltaic (PV) module manufacturing lines. The PV cells and modules are fabricated using Copper-Indium-Gallium-Selenide (CIGS) and a proprietary electrochemical process. The SoloPower product is built on a thin, flexible foil substrate in a high throughput, roll-to-roll process. SoloPower's unique electrochemistry-based CIGS technology enables production of highly efficient solar cells in an alternative manner to traditional silicon-based solar technologies. The facility is expected to be built and begin operation in 2012.

Emissions

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
NO_x	0	N/A	0	N/A	39	39
CO	0	N/A	0	N/A	99	99
VOC	0	N/A	0	N/A	39	39

Hazardous Air Pollutants

A major source is a facility that has the potential to emit 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs. This facility is not a major source of hazardous air pollutants.

Hazardous Air Pollutant	Potential to Emit (tons/year)
Diethylene Glycol Monoethyl Ether Acetate (DGMEA)	1.41
Propylene Glycol Monopropyl Ether (PGME)	0.19
Total	**1.6**

St. Johns Landfill Metropolitan Service District – Title V #26-3310-TV-01

9363 N Columbia Blvd Portland OR 97203-1048

Overview

Metropolitan Service District (Metro) owns and operates St. Johns Landfill (SJLF) on 238 acres of property located at 9363 N. Columbia Blvd. Metro awarded a contract in 1997 for the landfill gas (LFG) rights to Portland LFG-Joint Venture, a partnership between affiliates of Palmer Capital Corp. and Ash Grove Cement Co. Beginning in March 1998, most of the LFG drawn from the landfill has been piped to Ash Grove Cement Co. Regardless of how LFG is utilized, all activities conducted at the SJLF site are the sole responsibility of Metro. Mr. Jim Watkins is the manager at Metro's engineering and enviro-services division, and he is currently identified as the primary responsible official for the permitted activities.

The facility accepted municipal solid waste until 1991. From the air quality perspective, the current activities at SJLF focus on treatment of LFG generated from the closed landfill. The generation of LFG is caused by the anaerobic decomposition of organic waste. The volume of LFG generation increased with respect to time from 1970 to until about 1991/1992, when the LFG generation peaked at a rate of about 2,000 scfm of recoverable methane. The LFG generation has been steadily declining since 1991/1992 to the current (year 2004/2005) LFG generation rate of about 900 scfm of recoverable methane. The LFG generation is projected to diminish to insignificant level by the year 2,024.

Landfill gas generated is kept from escaping to the atmosphere through the combination of plastic cover over the entire landfill and a vacuum system that draws LFG from beneath the cover through a network of vertical and horizontal wells to an on-site motor blower/flare facility (MBFF). Landfill gas enters MBFF through two condensate knockout tanks that extracts condensate (by pressure drop) and filters the gas. Each tank has an open drain valve for discharge to manhole. Before LFG enters the pipeline to Ash Grove, the MBFF pipes it to an on-site Compressor Station (CPS) where it is compressed and chilled to remove moisture in LFG. The condensate is drained from the low points in the pipes and at tanks at MBFF, and the collected (under negative pressure) condensate is eventually mixed with landfill leachate in an on-site manhole/pump station. The final mixture is discharged to the City of Portland

Wastewater Treatment Facility. The compressed LFG is piped to Ash Grove Cement Co. (SM ACDP 26-1891), which burns LFG with other fuels in their limekiln. Excess LFG not taken by Ash Grove Cement Co. is flared in one of the two flares currently operating.

The volume of LFG discharged from the MBFF to the CPS at any given time varies with Ash Grove's demand for the gas. During those periods when the LFG generation exceeds the volume piped to the CPS per Ash Grove demand, the excess LFG is flared at approximately 1,750 °F in one or more of two enclosed ground flares (FL02, FL04) at MBFF. The flares are maintained in an automatic mode, and the flaring mode can range from none to all two operating at any given time.

Emissions

The cumulative PSEL increases since the baseline year is less than the Significant Emission Rate (SER) as defined in OAR 340-200-0020 (118) for all criteria pollutants.

Pollutant	Baseline PSEL (tons/yr)	Proposed PSEL (tons/yr)	Increase (tons/yr)	SER (tons/yr)
PM_{10}	--	14	14	15
SO_2	0	39	39	40
NO_x	0	39	39	40
CO	0	99	99	100
VOC	9	39	30	40

Hazardous Air Pollutants

Metro's SJLF is a minor source of hazardous air pollutants (HAPs). The HAPs emissions on an aggregate basis total less than 1 ton/year. As with HAP emissions, the amount of all toxic and flammable substances currently used at the SJLF facility is insignificant. The SJLF facility does not use any stratospheric ozone-depleting substances.

The SJLF facility is not currently subject to the accidental release prevention regulation in 40 CFR 68. No quantities of listed substances used in a process at this facility exceed the quantities that trigger applicability of the risk management plan (RMP) by the date specified in 40 CFR 68.10.

HAP Emissions Estimate:

Hazardous Air Pollutant	CAS No.	HAP Emissions (lbs/yr)	
		Flare Emissions	Vacuum Pump

Acetone	67641	29.90	3.23
Methylene Chloride	75150	2.38	0.26
2-Butanone	78933	64.45	6.96
4-Methyl-2-Pentanone	108101	7.44	0.80
Toluene	108883	94.71	10.23
Ethylbenzene	100414	83.14	8.98
Xylene Isomers	1330207	220.76	23.84
Styrene	100425	2.97	0.32
1,4-Dichlorobenzene (para)	106467	4.44	0.01
Chlorobenzene	108907	4.96	0.54
Tetrachloroethene	127184	4.53	0.49
Trichloroethene	79016	3.02	0.33
1,1-Dichloroethane	75343	1.61	0.17
Vinyl Chloride	75014	10.09	1.09
cis-1,2-Dichloroethene	540590	7.85	0.85
Benzene	71432	4.41	0.48
Carbon Disulfide	75150	--	3.18
Chloroform	67663	--	3.56
2-Hexanone	591786	--	1.83
Phenol	108952	--	2.01
Benzyl Alcohol	--	--	2.19
4-Methylphenol	106445	--	1.34
Isophorone	78591	--	0.18
2,4-Dimethylphenol	--	--	0.01
Naphthalene	91203	--	0.04
4-Chloro-3-Methylphenol	--	--	0.02
Diethylphthalate	--	--	0.15
PCB-1242	1336363	--	0.0008
Bis (2-Ethylhexyl) phthalate	117817	--	0.0061
Sub Total:		**547**	**73**
Total Aggregate HAPS:		**620**	

Vigor – Title V #26-3224-TV-01
5555 N Channel Ave Bldg 71 Portland OR 97217-7672

Overview

Cascade General, Inc. is a subsidiary of "Vigor Industrial, LLC" that operates a shipbuilding and repair facility in the Portland Shipyard (PSY), which also includes a barge building facility – "US Barge". Typical repairs to the vessel exterior include abrasive (steel shot/slag) blasting, coating applications, and welding. Typical repairs to the vessel interior may include abrasive (steel shot/slag) blasting, coating, boiler repair and testing, and/or servicing of the ship's refrigeration system. Other repair work may include pipe fitting, machining, steel fabrication and installation, and other miscellaneous tasks.

Vessels entering the shipyard for repairs dock at berths along the Swan Island Lagoon. Berths 306, 307, 308, 311, and 315 are also available for non-ship repair activities. Dry docks 1 or 3 is used for the vessels requiring work on the exterior hull below the main deck. Cascade General sold the largest dry dock (formerly No. 4) that existed at the PSY back in 2001, and consequently Vigor no longer has the capacity to repair super-large vessels. The pipelines transfer oil slops from ships (ballast Tanks) docked at berths and dry docks to the ballast water treatment plant. Central Utility Building (CUB) houses an air compressor and two boilers for steam generation. Other miscellaneous emission sources include storage tanks, truck-loading operations, and the vehicle travel that generates road dust.

Of all the ship repair/building operations conducted at the PSY, the PM/PM_{10} emissions from outdoor sandblasting operations (SBO) and VOC/VOHAP emissions from ship-coating applications ($COAT_{SHIP}$) are the two major sources of emissions that exist at the VIGOR facility (i.e., PSY).

Emissions

The following table provides a summary of baseline emissions, netting basis, and the plant site emission limits incorporated in the proposed permit:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	256	256	256	263	263	0
PM_{10}	124	124	124	124	124	0
SO_2	4	4	4	39	39	0
NO_x	8	8	8	39	39	0
CO	2	2	2	99	99	0
VOC	500	425	425	464	464	0

Hazardous Air Pollutants

Vigor Industrial, LLC is a major source of hazardous air pollutants (HAPs) because it has the potential to emit (PTE) of more than 10 tons/year of individual HAP and the PTE of more than 25 tons/year of combined HAPs. National Emission Standards for Hazardous Air Pollutants (NESHAP, subpart II) for marine coating operations (COAT$_{SHIP}$), 40 CFR, Part 63.783 are incorporated in the permit to regulate the facility's HAP emissions. Emissions detail sheets attached to this review report provides summary of Vigor's potential HAP emissions.